WHAT IS CLAIMED IS:

1. A photoelectric converter, comprising:

photoelectric conversion circuit for generating an optical signal in correspondence to incident light;

reset circuit connected to an output terminal of the photoelectric conversion circuit;

amplification circuit connected to output terminals of the photoelectric conversion circuit and the reset circuit;

hold circuit connected to an output terminal of the amplification circuit; and

signal read means for reading out a signal from the hold circuit,

wherein the hold circuit holds a reference signal generated through resetting of the photoelectric conversion circuit by the reset circuit.

2. A photoelectric converter according to claim 1, wherein the signal read means reads out the reference signal and subsequently reads out the optical signal.

3. A photoelectric converter, comprising:

photoelectric conversion circuit for generating an optical signal in correspondence to incident light;

reset circuit connected to an output terminal of the photoelectric conversion circuit;

amplification circuit connected to output terminals of the photoelectric conversion circuit and the reset circuit;

electric charge transfer means having a terminal connected to an output terminal of the amplification circuit;

a capacitor connected to the other terminal of the electric charge transfer means;

a source follower amplifier having a gate connected to the electric charge transfer means and the capacitor;

channel selection circuit connected to a source of the source follower amplifier; and

a common signal line to which an output terminal of the channel selection circuit is connected,

wherein the capacitor holds a reference signal generated through resetting of the photoelectric conversion circuit by the reset circuit, and when the channel selection circuit is turned ON, the reference signal is read out from the capacitor to the common signal line, and then the electric charge transfer means is turned ON to read out the optical signal to the common signal line.

4. A photoelectric converter according to claim 3, wherein after the reference signal and the optical signal are read out to the common signal line, the channel selection circuit is turned OFF, and the electric charge transfer means is turned ON to read out to the capacitor a reference signal generated through resetting

of the photoelectric conversion circuit by the reset circuit.

5. A photoelectric converter according to claim 3, wherein a first current source is connected to the common signal line, and a second current source is connected to a source of the source follower amplifier.

6. A photoelectric converter according to claim 5, wherein while the channel selection circuit is held in an ON state, the first current source is turned ON to cause a current to flow, and when the electric charge transfer means is turned ON to read out the reference signal to the capacitor, the second current source is turned ON to cause a current to flow.

7. A photoelectric converter according to claim 5, wherein the current caused to flow through the second current source is substantially the same as that caused to flow through the first current source.

8. A photoelectric converter according to claim 5, wherein the first and second current sources are constituted by MOS transistors, respectively, and drains of the MOS transistors are connected to a source of the source follower amplifier, and control for turning ON and OFF of the first and second current sources is

carried out by changing gate voltages of the MOS transistors.

9. A photoelectric converter, comprising:

photoelectric conversion circuit for generating an optical signal in correspondence to incident light;

reset circuit connected to an output terminal of the photoelectric conversion circuit;

first amplification circuit connected to output terminals of the photoelectric conversion circuit and the reset circuit;

first hold circuit connected to an output terminal of the first amplification circuit;

second hold circuit connected to the first hold circuit;

third hold circuit connected to the second hold circuit; and

signal read means connected to the third hold circuit,

wherein the third hold circuit holds a reference signal generated through resetting of the photoelectric conversion circuit by the reset circuit, and the first hold circuit and the second hold circuit hold the reference signal and the optical signal in order.

10. A photoelectric converter according to claim 9, wherein the signal read means reads out the reference signal and subsequently reads out the optical signal.

11. A photoelectric converter according to claim 9, wherein a first current source is connected to the common signal line which is connected to the signal read means, and a second current source is connected to a source of the source follower amplifier which constitutes the signal read means.

12. A photoelectric converter, comprising:

photoelectric conversion circuit for generating an optical signal in correspondence to incident light;

reset circuit connected to an output terminal of the photoelectric conversion circuit;

first amplification circuit connected to output terminals of the photoelectric conversion circuit and the reset circuit;

first electric charge transfer means having a terminal connected to an output terminal of the first amplification circuit;

a first capacitor connected to the other terminal of the first electric charge transfer means;

second amplification circuit connected to the first electric charge transfer means and the first capacitor;

second electric charge transfer means having a terminal connected to an output terminal of the second amplification circuit;

a second capacitor connected to the other terminal of the second electric charge transfer means;

a third amplification circuit connected to the second electric

charge transfer means and the second capacitor;

third electric charge transfer means having a terminal connected to an output terminal of the third amplification circuit;

a third capacitor connected to the other terminal of the third electric charge transfer means;

a source follower amplifier having a gate connected to the third electric charge transfer means and the third capacitor;

channel selection circuit connected to a source of the source follower amplifier; and

a common signal line connected to an output terminal of the channel selection circuit.

13. A photoelectric converter according to claim 12, wherein when the channel selection circuit is turned ON, the reference signal is read out from the third capacitor to the common signal line, and then the third electric charge transfer means is turned ON to read out the optical signal from the second capacitor to the common signal line.

14. A photoelectric converter according to claim 12, wherein after the reference signal and the optical signal are read out to the common signal line, the channel selection circuit is turned OFF, and the reference signal held by the first capacitor is read out to the third capacitor.

15. A photoelectric converter according to claim 12, wherein a first current source is connected to the common signal line, and a second current source is connected to a source of the source follower amplifier.

16. A photoelectric converter according to claim 15, wherein while the channel selection circuit is held in an ON state, the first current source is turned ON to cause a current to flow, and when the third electric charge transfer means is turned ON to read out the reference signal to the third capacitor, the second current source is turned ON to cause a current to flow.

17. A photoelectric converter according to claim 15, wherein the current caused to flow through the second current source is substantially the same as that caused to flow through the first current source.

18. A photoelectric converter according to claim 15, wherein the first and second current sources are constituted by MOS transistors, respectively, and drains of the MOS transistors are connected to a source of the source follower amplifier, and control for turning ON and OFF of the first and second current sources is carried out by changing gate voltages of the MOS transistors.

19. A driving method for a photoelectric converter having:

photoelectric conversion circuit for generating an optical signal in correspondence to incident light;

reset circuit connected to an output terminal of the photoelectric conversion circuit;

amplification circuit connected to output terminals of the photoelectric conversion circuit and the reset circuit;

hold circuit connected to an output terminal of the amplification circuit; and

signal read means connected to output terminals of the amplification circuit and the hold circuit, the driving method comprising the steps of:

resetting the photoelectric conversion circuit by the reset circuit;

reading out a reference signal generated through the resetting from the amplification circuit to be held in the hold circuit;

accumulating an optical signal generated in correspondence to incident light for a fixed time interval after release of the reset in the photoelectric conversion circuit;

reading out the reference signal from the hold circuit by the signal read means; and

reading out the optical signal from the photoelectric conversion circuit by the signal read means.

20. A driving method for a photoelectric converter having:

photoelectric conversion circuit for generating an optical signal in correspondence to incident light;

reset circuit connected to an output terminal of the photoelectric conversion circuit;

first amplification circuit connected to output terminals of the photoelectric conversion circuit and the reset circuit;

first hold circuit connected to an output terminal of the first amplification circuit;

second hold circuit connected to the first hold circuit;

third hold circuit connected to the second hold circuit; and

signal read means connected to the third hold circuit, the driving method comprising the steps of:

resetting the photoelectric conversion circuit by the reset circuit;

reading out a reference signal generated through the resetting from the amplification circuit to be held in the third hold circuit;

reading out from the amplification circuit an optical signal generated in the photoelectric conversion circuit in correspondence with incident light for a fixed time interval after release of the reset to be held in the second hold circuit;

reading out the reference signal from the third hold circuit by the signal read means; and

reading out the optical signal from the second hold circuit by the signal read means.

21. A driving method for a photoelectric converter according to claim 20, further comprising the steps of:

resetting the photoelectric conversion circuit by the reset circuit;

reading out a reference signal generated through the resetting from the first amplification circuit to be held in the first hold circuit;

reading out the reference signal and the optical signal by the signal read means; and

reading out the reference signal from the first hold circuit to the third hold circuit.